

Work Order ID 81399

March-14-12 7:47:38 AM

\*81399\*

Page 1

Item ID: D350-636-015

Accept

\*N900040100\*

Setup

Start

\*NS1\*

Revision ID:

Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 13/03/2012 Start Qty: 1.00 \*1\*

Required Date: 27/03/2012 Req'd Qty: 1.00 \*1\*

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: ML5

Date: 12/03/14

Tooling:

Date:

Run

Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3492	C								
D4168	A								
JIN-D350-636	I								
100		0.00							

\*100\*

DOCUMENT CONTROL

Memo

0.00

Photocopy blue file and type labels per PPP D350-636-015 CHG 002

Or chg 3 per  
ECN 12-542

(depends on D151-001)  
Rev B or C

DC

Document Control

12-05-10  
H. L. 12-5-10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 81399

March-14-12 7:47:38 AM

\*81399\*

Page 2

Item ID: D350-636-015

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Item Name: Skidtube STD w/ Training Wearplates, LH

Stop

\*NS2\*

Start Date: 13/03/2012 Start Qty: 1.00 \*1\*

Cust Item ID:

Required Date: 27/03/2012 Req'd Qty: 1.00 \*1\*

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_

Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

\*NR1\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

110

\*110\*

Skidtubes

Memo

0.00

0.00

1- Pick D2600-3 Bent  
2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside  
AFT end per dwg D4168

3- Drill pilot holes for blade fitting bolt holes using DT8983. Open to 0.500",  
debur, section H-H

4- Locate DT8330 off of blade fitting bolt holes and drill pilot holes for blade  
fitting, section H-H

5- Drill fwd step holes using DT9616. Ensure proper positioning. All holes as  
per dwg D4168, detail A

6- Drill pilot holes as per Dwg D4168 sheet 4 (D4168-1 details). Drill using drill  
Jig DT8150 & DT8863A for first side only DT8863B for second side (detail B)

7- Clecko DT8863B on second side of tube and drill pilot holes for detail B.  
\*\*\*SECOND SIDE\*\*\*

8- Drill most FWD wearplate hole using DT9678 locating off of 66.54" hole.

9-Open up holes of Detail A to 0.297" (total of 2 holes per side) and .201" (total  
of 1 hole per side) open holes of detail D section H-H to 0.500" as per dwg  
D4168

10-Weld D2744 Cap as per Dwg D4168 and QSI 004.Fill grooves in bend left  
from bending as per QSI 004

B 12/04/04

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 81399

March-14-12 7:47:38 AM

\*81399\*

Page 3

Item ID: D350-636-015

Accept

\*N900040100\*

Setup

Start

\*NS1\*

Revision ID:

Item Name: Skidtube STD w/ Training Wearplates, LH

Stop

\*NS2\*

Start Date: 13/03/2012 Start Qty: 1.00 \*1\*

Cust Item ID:

Required Date: 27/03/2012 Req'd Qty: 1.00 \*1\*

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run

Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

A/R Aluminum Rod batch: *M120/64 8E12/04/05*

11-Grind welds flush as per Dwg D4168

*→ CF 12.45*

120

\*120\*

QC

Quality Control

QC10- Inspect visual per QSI004- ground welds

Memo

0.00

*S.17/04/09*

130

\*130\*

QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

*S.17/04/09*

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 81399

\*81399\*

Page 4

March-14-12 7:47:38 AM

Item ID: D350-636-015

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Item Name: Skidtube STD w/ Training Wearplates, LH

Stop

\*NS2\*

Start Date: 13/03/2012 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 27/03/2012 Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

140

Chemical Conversion Coat per QSI005 4.1

0.00

\*140\*

HandFinish

Hand Finishing

① SAD 2-24-09

150

QC3- Inspect Part Finish

0.00

\*150\*

QC

Quality Control

1 0 2012-04-10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date &amp; initial all entries

Work Order ID 81399

March-14-12 7:47:38 AM

\*81399\*

Page 5

Item ID: D350-636-015

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 13/03/2012 Start Qty: 1.00 \*1\*

Cust Item ID:

Required Date: 27/03/2012 Req'd Qty: 1.00 \*1\*

Customer:

Reference:

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
	QC:	Date:	SPC (Y/N):	Date:	Stop		*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160		0.00							
*160*	Skidtubes								
Skidtubes	Memo	0.00							
Skidtubes	1-Open up holes of Detail C and ground handling section AL-AL to 0.625" (total of 8 holes per side) as per dwg D4168.								
	2-Open up holes of Detail B to 0.750" (total of 4 holes per side) as per dwg D4168.								
	3- Open float hole to 0.500" (4 per side) section AJ-AJ								
	Open wearplate holes to size as per dwg (4 holes per sides) , section CG-CG								
	4-Chamfer holes of Detail B, C, ground handling section AL-AL and float holes section AJ-AJ per dwg D4168 (welding instructions on sheet 8)								
	5-Deburr and blow out all chips from inside of tube								
	6- Prepare tube for welding, remove alodine as required.								
	7-Bond web D2739 in place as per QSI 015 A/R Sikaflex-291 batch: <u>120813</u> exp. date: <u>12/08/13</u>								
	8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D4168 and D4170-1 & QSI004 (welding instructions on sheet 8) A/R Aluminum Rod batch: <u>m120854</u>								
	9- At section AJ-AJ drill out x-bolt spacer to 0.404"								

BB 12/04/10

12/08/13

BB 12/04/12

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 81399

March-14-12 7:47:38 AM

\*81399\*

Page 6

Item ID: D350-636-015

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 13/03/2012 Start Qty: 1.00 \*1\*

Required Date: 27/03/2012 Req'd Qty: 1.00 \*1\*

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

10-Grind welds flush as per Dwg D4168

11-Spot face ground handling holes section (total of 4 places per side) as per  
dwg D4168, section AL-AL

12- C'bore section CG-CG

13- Deburr holes

\*\*\*\*\* FOR DELUXE SKIDTUBE IF APPLICABLE DRILL TOW RING  
HOLE IN TUBE \*\*\*\*\*

170

QC10- Inspect visual per QSI004- ground welds

0.00

817b616

\*170\*

QC

Quality Control

Memo

0.00

7/6/13  
12-4-13  
CF  
B/CC 12/6/16

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date &amp; initial all entries

Work Order ID 81399

March-14-12 7:47:38 AM

\*81399\*

Page 7

Item ID: D350-636-015

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Item Name: Skidtube STD w/ Training Wearplates, LH

Stop

\*NS2\*

Start Date: 13/03/2012 Start Qty: 1.00 \*1\*

Cust Item ID:

Required Date: 27/03/2012 Req'd Qty: 1.00 \*1\*

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

180

\*180\*

QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Σ 2616

190

\*190\*

HandFinish

Hand Finishing

Pressure Wash per QSI005 4.3

0.00

Memo

0.00

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.

12/16/12-417

200

\*200\*

Powdercoat

Powder Coating

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

Memo

1-10

0.00

START TIME:

320

OVEN TEMPERATURE:

0 F

FINISH TIME:

1-40

1X/ 12/04/17

W121134

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 81399

March-14-12 7:47:38 AM

\*81399\*

Page 8

Item ID: D350-636-015

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 13/03/2012 Start Qty: 1.00 \*1\*

Cust Item ID:

Required Date: 27/03/2012 Req'd Qty: 1.00 \*1\*

Customer:

Reference:

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
	QC:	Date:	SPC (Y/N):	Date:	Stop		*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210	QC3- Inspect Part Finish	0.00							
*210*	QC								
Quality Control	Memo	0.00							
	Inspect for foreign object per QSI 024								
220		0.00							
*220*	HandFinishing								
HandFinish	Memo	0.00							
Hand Finishing	1- Install inserts as per Dwg D4168								

16+1 4 12/05/09

14 20 12/05/09.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 81399

\*81399\*

March-14-12 7:47:38 AM

Page 9

Item ID: D350-636-015

Accept

\*N900040100\*

Setup

Start

\*NS1\*

Revision ID:

Item Name: Skidtube STD w/ Training Wearplates, LH

Stop

\*NS2\*

Start Date: 13/03/2012 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 27/03/2012 Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run

Start

\*NR1\*

QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

230

\*230\*

HandFinish

Hand Finishing

HandFinishing

0.00

1 8

20

14/05/09

Memo

0.00

1-Inspect for Foreign Objects

2-Spray inside of tube with "LPS-3" batch: N/A

3-Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D4168

SIKA FLEX 241

BATCH: 121221

EXP DATE: 13/01

4-assemble o'ring to plug as per dwg D3492 and apply o'ring lube

A/R 55-o'ring lube batch: 10348

5-Coat all exposed fasteners with "LPS Procyon" batch: 114596

240

QC5- Inspect part completeness to step on W/O

0.00

0.00 8.7/05/09

\*240\*

QC

Quality Control

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 81399

March-14-12 7:47:38 AM

\*81399\*

Page 10

Item ID: D350-636-015

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 13/03/2012 Start Qty: 1.00 \*1\*

Cust Item ID:

Required Date: 27/03/2012 Req'd Qty: 1.00 \*1\*

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

250

Pick Kit

0.00

\*250\*

Packaging

Memo

0.00

Packaging

If making a D350-636-215  
pick kit will only require:  
1 X AN3C37A  
1 X AN3C34A  
1 X AN3C42A  
2 X D3493-1

12/5/98  
S

260

QC4- 100% Inspect kits for completeness

0.00

\*260\*

QC

Memo

0.00

Quality Control

\*\*\*\*\*ensure antiseize is on AN8C21A bolts\*\*\*\*\*

6 12-05-10

270

Packaging

0.00

\*270\*

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPPD350-636-015

Location: \_\_\_\_\_

PPP rev: d

R SP  
81399 12-5-10

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 81399

\*81399\*

Page 11

March-14-12 7:47:38 AM

Item ID: D350-636-015

Accept

\*N900040100\*

Setup

Start

\*NS1\*

Revision ID:

Item Name: Skidtube STD w/ Training Wearplates, LH

Stop

\*NS2\*

Start Date: 13/03/2012 Start Qty: 1.00 \*1\*

Cust Item ID:

Required Date: 27/03/2012 Req'd Qty: 1.00 \*1\*

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run

Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

280

\*280\*

QC

Quality Control

QC21- Final Inspection - Work Order Release

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

0.00

0.00

12/15/10

MUJ/12/10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Picklist Print**

March-14-12 7:47:42 AM

Page 1

Work Order ID: 81399

**\*81399\***

Parent Item: D350-636-015

**\*D350-636-015\***

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 13/03/2012

Required Date: 27/03/2012

Start Qty: 1.00

Required Qty: 1.00

**Comments:** IPP rev:A 10.09.28 new issue DD verf:EC  
11.04.14 ecn11-553 DD verf:EC  
NCR 11-906 DD verf:EC

IPP Rev:B  
IPP Rev:C 11.10.18 as per

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN3C34A		Purchased	No			230	Each	51.0000	1	1	1	12/05/09	SP

**\*AN3C34A\***  
BOLT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST353	51	
116075	31	
117514	20	

AN3C36A  
**\*AN3C36A\***  
BOLT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	4	
101261	4	
ST353	154	
116590	0	
119083	2	
119324	57	
120641	40	
121013	55	

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Picklist Print**

March-14-12 7:47:42 AM

Page 2

Work Order ID: 81399

**\*81399\***

Parent Item: D350-636-015

**\*D350-636-015\***

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 13/03/2012

Required Date: 27/03/2012

Start Qty: 1.00

Required Qty: 1.00

AN3C37A

Purchased

No

230

Each

110.0000

1

1

\*\*

**\*AN3C37A\***

BOLT

M1215840

SP

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST354	110	
116874	11	
117010	2	
120422	47	
120731	50	

AN3C42A

Purchased

No

230

Each

43.0000

1

1

\*\*

**\*AN3C42A\***

BOLT

SL

SP

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST354	43	
106176	1	
118131	2	
119673	15	
120464	25	

D3492-1

Manufactured

No

230

Each

130.0000

8

8

\*\*

**\*D3492-1\***

Plug

8 12/05/09  
SP

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP002	130	
69531	8	
74444	2	
76235	20	
77037	100	

83048✓

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Picklist Print**

March-14-12 7:47:42 AM

Page 3

Work Order ID: 81399

**\*81399\***

Parent Item: D350-636-015

**\*D350-636-015\***

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 13/03/2012

Required Date: 27/03/2012

Start Qty: 1.00

Required Qty: 1.00

D3492-3

Manufactured No

230

Each

69.0000

8

8

\*\*

8

(28)

12/05/09

**\*D3492-3\***

Plug

Location	Loc Qty	Loc Code
FP-A	83099✓	69
78600	69	

D3873-1

Manufactured No

230

Each

228.0000

7

7

\*\*

7

(28)

12/05/09

**\*D3873-1\***

Bushing

Location	Loc Qty	Loc Code
ST057	76791✓	182
79561	182	
ST067	46	
64760	1	
68247	4	
73829	19	
73830	2	
79560	20	

D4154-041

Rev.B

Manufactured No

230

Each

2.0000

1

1

\*\*

1

(28)

12/05/09

**\*D4154-041\***

Wearplate Assembly

Location	Loc Qty	Loc Code
FG	2	
77007	2	

D4170-1

Manufactured No

230

Each

13.0000

4

4

\*\*

4

8E12/01/09  
B 82043 \*4**\*D4170-1\***

Bushing

Location	Loc Qty	Loc Code
LG001	13	
71844	5	
76677	8	

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

# Picklist Print

March-14-12 7:47:42 AM

Page 4

Work Order ID: 81399

\*81399\*  
\*D350-636-015\*

Parent Item: D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 13/03/2012

Required Date: 27/03/2012

Start Qty: 1.00

Required Qty: 1.00

D4171-1

Manufactured No

230

Each

9.0000

1

1

\*\*

1  
AP

12/05/09.

\*D4171-1\*

Bushing

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST135	9	
77008	9	

MS21043-3

Purchased No

230

Each

840.0000

4

4

\*\*

4  
AP

12/05/09.

\*MS21043-3\*

Nut

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	72	
103691	72	
GA	334	
120693	334	
ST301	434	
118077	2	
118614	382	
118686	30	
119758	20	

NAS1149C0363R

Purchased No

230

Each

3,381.000

8

\*\*

8  
AP

12/05/09.

\*NAS1149C0363R\*

Washer

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST297	3381	
114742	3381	

\* should be 9 instead

of 8 \* AP

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Picklist Print**

March-14-12 7:47:42 AM

Page 5

Work Order ID: 81399

**\*81399\***

Parent Item: D350-636-015

**\*D350-636-015\***

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 13/03/2012

Required Date: 27/03/2012

Start Qty: 1.00

Required Qty: 1.00

NAS1515H3L

Purchased No

230

Each

184.0000

4

4

\*\*

4

(P)

12/05/09

**\*NAS1515H3L\***

WASHER

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG 121551	40	
102472	40	
ST277	144	
118686	3	
119438	1	
120072	40	
120360	100	

NAS1611-010

Purchased No

230

Each

209.0000

8

8

\*\*

8

(P)

12/05/09

**\*NAS1611-010\***

O-RING

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP	50	
110915	0	
120770	50	
FP001	159	
110915	14	
117460	8	
118077	1	
118612	3	
119438	47	
120308	36	
120986	50	

121415

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Picklist Print**

March-14-12 7:47:42 AM

Page 6

Work Order ID: 81399

**\*81399\***  
**\*D350-636-015\***

Parent Item: D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 13/03/2012

Required Date: 27/03/2012

Start Qty: 1.00

Required Qty: 1.00

NAS1611-013

Purchased

No

230

Each

168.0000

8

8

\*\*

(28)

12/05/09

**\*NAS1611-013\***

O-RING

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001	121584✓	168
116582	5	
117291	2	
117887	53	
119623	36	
120360	22	
120910	50	

NAS1149D0863J

Purchased

No

250

Each

231.0000

2

2

\*\*

(28)

80

**\*NAS1149D0863J\***

WASHER

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST298	231	
118078	36	
119307	95	2
120308	100	

D2744

Manufactured

No

110

Each

60.0000

1

1

\*\*

8E 12/04/05

**\*D2744\***

Cap

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG002	60	
62715	1	
70881	10	
71861	7	
78900	42	1

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

# Picklist Print

March-14-12 7:47:42 AM

Page 7

Work Order ID: 81399

\*81399\*  
\*D350-636-015\*

Parent Item: D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 13/03/2012

Required Date: 27/03/2012

Start Qty: 1.00

Required Qty: 1.00

D2600-3-BENT

Manufactured No

110

Each

25.0000

1

1

\*\*

BB 12/04/09 X

\*D2600-3-BENT\*

Extrusion Bent

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG	25	
66875	7	
73253	1	
75021	1	
75022	1	
75023	1	
81330	14	

D2743

Manufactured No

160

Each

248.0000

8

8

\*\*

8/02/04/12

8 81965 x8

\*D2743\*

Crossbolt Spacer

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG001	248	
67766	4	
68251	3	
73403	64	
74445	1	
78603	76	
79517	100	

D2739

Manufactured No

160

Each

8.0000

1

\*\*

1 3 12/09/10

\*D2739\*

350 I Beam

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG	8	
72155	1	
80083	7	

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

# Picklist Print

March-14-12 7:47:42 AM

Page 8

Work Order ID: 81399

\*81399\*  
\*D350-636-015\*

Parent Item: D350-636-015

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 13/03/2012

Required Date: 27/03/2012

Start Qty: 1.00

Required Qty: 1.00

D3490-3

Manufactured No

160

Each

38.0000

4

4

\*\*

\*D3490-3\*

Cross Bolt Spacer

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG001	38	
78800	38	

D3490-1

Manufactured No

160

Each

49.0000

4

4

\*\*

\*D3490-1\*

Cross Bolt Spacer

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG001	49	
62450	2	
74875	4	
77042	3	
78793	40	

ALS4-1032-225

Purchased No

230

Each

1,134.000

4

4

\*\*

\*AI S4-1032-225\*

Insert

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST281	1021	
108696	146	
110768	62	
118386	55	
118966	68	
120671	690	
ST282	113	
120410	100	
120451	13	

12128✓

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

# Picklist Print

March-14-12 7:47:42 AM

Page 9

Work Order ID: 81399

**\*81399\***

Parent Item: D350-636-015

**\*D350-636-015\***

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 13/03/2012

Required Date: 27/03/2012

Start Qty: 1.00

Required Qty: 1.00

AN8C35A

Purchased

No

230

Each

65.0000

1

1

\*\*

**\*AN8C35A\***

BOLT

OP 12/05/09

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP002	64	
-------	----	--

115960	1	
--------	---	--

117834	10	
--------	----	--

118286✓	53	
---------	----	--

ST346	1	
-------	---	--

114442	0	
--------	---	--

115188	0	
--------	---	--

115960	1	
--------	---	--

D3488-041

Manufactured

No

230

Each

17.0000

1

1

\*\*

**\*D3488-041\***

Blade Fitting Assembly, LH

OP 12/05/09

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP002	17	
-------	----	--

61689	1	
-------	---	--

75056	7	
-------	---	--

77021	9	
-------	---	--

AN6C44A

Purchased

No

230

Each

107.0000

4

4

\*\*

**\*AN6C44A\***

BOLT

OP 12/05/09

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FG	2	
----	---	--

103964	2	
--------	---	--

ST343	105	
-------	-----	--

120095	12	
--------	----	--

120143	25	
--------	----	--

120465	27	
--------	----	--

120641	21	
--------	----	--

121013	20	
--------	----	--

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

# Picklist Print

March-14-12 7:47:42 AM

Page 10

Work Order ID: 81399

\*81399\*

Parent Item: D350-636-015

\*D350-636-015\*

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 13/03/2012

Required Date: 27/03/2012

Start Qty: 1.00

Required Qty: 1.00

MS21083C8

Purchased No

230

Each

85.0000

1

1

\*\*

1

(20)

12/05/09

\*MS21083C8\*

NUT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP002	12185	1
-------	-------	---

115884	1	
--------	---	--

ST303	14	
-------	----	--

115884	0	
--------	---	--

118077	1	
--------	---	--

119309	2	
--------	---	--

119436	9	
--------	---	--

119638	2	
--------	---	--

ST304	70	
-------	----	--

120142	20	
--------	----	--

120731	25	
--------	----	--

121011	25	
--------	----	--

D3631-1

Manufactured No

230

Each

223.0000

8

8

\*\*

8

(20)

12/05/09

\*D3631-1\*

Washer

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

ST072	93588	223
-------	-------	-----

68062	2	
-------	---	--

75548	221	
-------	-----	--

AN960C10L



NAS1149C0332

Purchased

No

230

Each

0.0000

4

4

\*\*

4

(20)

12/05/09

\*AN960C10L \*

washer

121509

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

# Picklist Print

March-14-12 7:47:43 AM

Page 11

Work Order ID: 81399

**\*81399\***

Parent Item: D350-636-015

**\*D350-636-015\***

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 13/03/2012

Required Date: 27/03/2012

Start Qty: 1.00

Required Qty: 1.00

D2745

Manufactured No

230

Each

136.0000

8

8

\*\*

8

(PP)

12/05/09

**\*D2745\***

Bushing

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP 81964 ✓	100	
79518	100	
FP001	36	
69529	1	
76142	1	
78597	34	

NAS1149C0832R

Purchased

No

230

Each

304.0000

1

1

\*\*

1

(PP)

12/05/09

**\*NAS1149C0832R\***

WASHER

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST297	304	
114915 ✓	304	

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

# Picklist Print

March-14-12 7:47:43 AM

Page 12

Work Order ID: 81399

\*81399\*

Parent Item: D350-636-015

\*D350-636-015\*

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 13/03/2012

Required Date: 27/03/2012

Start Qty: 1.00

Required Qty: 1.00

AN3C6A

Purchased No

230

Each

623.0000

4

4

\*\*

4

(P)

17/05/09

\*AN3C6A\*

BOLT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001	1	
111982	1	
ST351	622	
111982	2	
116419	23	
116549	2	
116704	12	
117619	10	
117688	1	
117872	5	
118422	13	
119449	21	
120423	133	
120693 ✓	400	

MS21043-6

Purchased No

230

Each

809.0000

4

4

\*\*

4

(P)

17/05/09

\*MS21043-6\*

NUT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	20	
103693	20	
ST301	789	
112314	83	
117887	6	
118384 ✓	200	
120308	500	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

# Picklist Print

March-14-12 7:47:43 AM

Page 13

Work Order ID: 81399

**\*81399\***

Parent Item: D350-636-015

**\*D350-636-015\***

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 13/03/2012

Required Date: 27/03/2012

Start Qty: 1.00

Required Qty: 1.00

D3493-1

Manufactured No

250

Each

66.0000

2

2

\*\*

*b2223*

*SP*

**\*D3493-1\***

Washer

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST050	66	
70697	2	
77573	24	
78835	40	

MS21083C8

Purchased No

250

Each

85.0000

2

2

\*\*

*m121524*

**\*MS21083C8\***

NUT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP002	1	
115884	1	
ST303	14	
115884	0	
118077	1	
119309	2	
119436	9	
119638	2	
ST304	70	
120142	20	
120731	25	
121011	25	

AN8C21A

Purchased No

250

Each

51.0000

2

2

\*\*

*m121167*

**\*AN8C21A\***

BOLT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST343	51	
118758	5	
120094	42	
120872	4	

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

# Picklist Print

March-14-12 7:47:43 AM

Page 14

Work Order ID: 81399

**\*81399\***

Parent Item: D350-636-015

**\*D350-636-015\***

Parent Item Name: Skidtube STD w/ Training Wearplates, LH

Start Date: 13/03/2012

Required Date: 27/03/2012

Start Qty: 1.00

Required Qty: 1.00

D2741

Manufactured No

250

Each

37.0000

1

1

\*\*

B79516

12/5/90

**\*D2741\***

Blade, 350 Skidtube

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST	-10	_____
ST466	47	_____
71856	1	_____
76984	36	_____

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D4168-041	350 SKIDTUBE ASSEMBLY, LH
	X			D4168-042	350 SKIDTUBE ASSEMBLY, RH
		X		D4168-043	350 SKIDTUBE ASSEMBLY, LH
			X	D4168-044	350 SKIDTUBE ASSEMBLY, RH
D	1	1	1	D2739	WEB
	8	8	8	D2743	SPACER
	1	1	1	D2744	CAP
	8	8	8	D2745	BUSHING
	1		1	D3488-041	BLADE FITTING, LH
		1	1	D3488-042	BLADE FITTING, RH
	4	4	4	D3490-1	SPACER
	4	4	4	D3490-3	SPACER
		4	4	D3490-5	SPACER
	8	8	8	D3492-041	PLUG ASSEMBLY
	8	8		D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
	8	8	8	D3631-1	WASHER
	7	7	7	D3873-1	BUSHING
	1	1	1	D4154-041	WEARPLATE ASSEMBLY
	1			D4168-1	SKIDTUBE WELDMENT, LH
		1		D4168-2	SKIDTUBE WELDMENT, RH
		1		D4168-3	SKIDTUBE WELDMENT, LH
	1		1	D4168-4	SKIDTUBE WELDMENT, RH
C	4	4	4	D4170-1	SPACER
	1	1	1	D4171-1	BUSHING
	4	4	4	ALS4-1032-225	INSERT
	4	4	4	AN3C6A	BOLT
	1	1	1	AN3C34A	BOLT
	4	4	4	AN3C36A	BOLT
	4	4	4	AN6C44A	BOLT
	1	1	1	AN8C35A	BOLT
	9	9	9	AN960C10	WASHER (OR NAS1149CO363R)
	4	4	4	AN960C10L	WASHER (OR NAS1149CO332R)
	1	1	1	AN960C816L	WASHER (OR NAS1149CO832R)
	5	5	5	MS21043-3	NUT
B	4	4	4	MS21043-6	NUT
	1	1	1	MS21083C8	NUT
	4	4	4	NAS1515H3L	WASHER

**GENERAL NOTES:**

- 1) MATERIAL: MAKE D4168-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- 2) FINISH:  
CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.  
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: D4168-041/-042/-043/-044 = 32.3 LBS
- 8) WELD PER DART QSI 004
- 9) FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:  
MINIMUM YIELD TENSILE STRENGTH = 35 KSI  
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- 10) COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- 11) SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- 12) SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

SHOP COPY

RETURN TO

ENGINEERING

UNCONTROLLED COPY

SUBJECT TO AMENDMENT

WITHOUT NOTICE

WORK ORDER

NO. 81399 MLJ

12/03/14

RELEASED  
2010-09-15

A	NEW ISSUE	SC	10.08.09
REV.	DESCRIPTION	BY	DATE
DESIGN	SC	DART AEROSPACE USA, INC.	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED	<i>RL</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>RL</i>	D4168	SHEET 1 OF 11
APPROVED	<i>RL</i>	TITLE	SCALE
DE APPR.	<i>RL</i>	350 SKIDTUBE ASSEMBLY	NTS
DATE	10.08.09	COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PROPRIETARY INFORMATION OF DART AEROSPACE USA, INC. IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR DISCLOSED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8

7

6

5

4

3

2

1

D

D

C

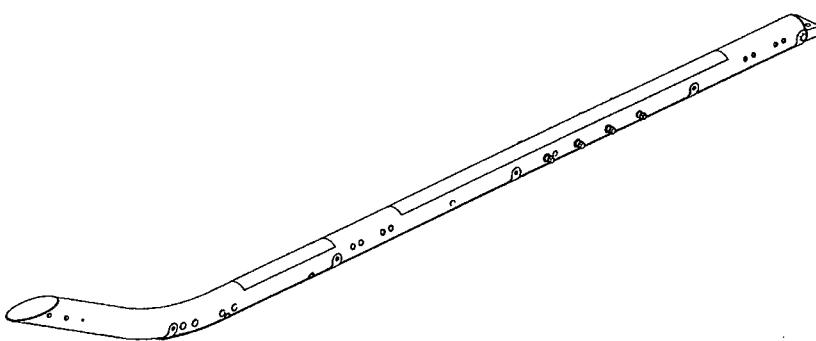
C

B

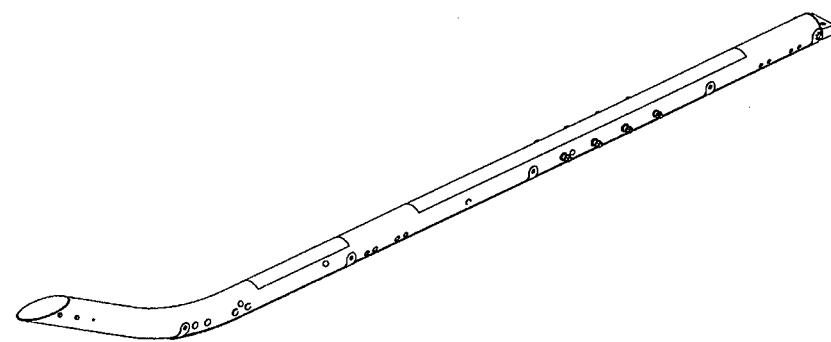
B

A

A



D4168-041 350 SKIDTUBE ASSEMBLY, LH



D4168-042 350 SKIDTUBE ASSEMBLY, RH

RELEASED  
2010-09-15  
JM

8

7

6

5

4

3

2

1

DESIGN	SC	DART AEROSPACE USA, INC.	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED	JM	DRAWING NO.	
MFG. APPR.	JM	D4168	REV. A
APPROVED	JM	SHEET 2 OF 11	
DE APPR.	JM	TITLE	SCALE
DATE	10.08.09	350 SKIDTUBE ASSEMBLY	NTS

COPYRIGHT © 2010 BY DART AEROSPACE USA, INC.  
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS  
NOT TO BE USED FOR ANY PURPOSE OR COPIED OR CONVESTITED TO ANY OTHER PERSON WITHOUT  
WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8

7

6

5

4

3

2

1

D

D

C

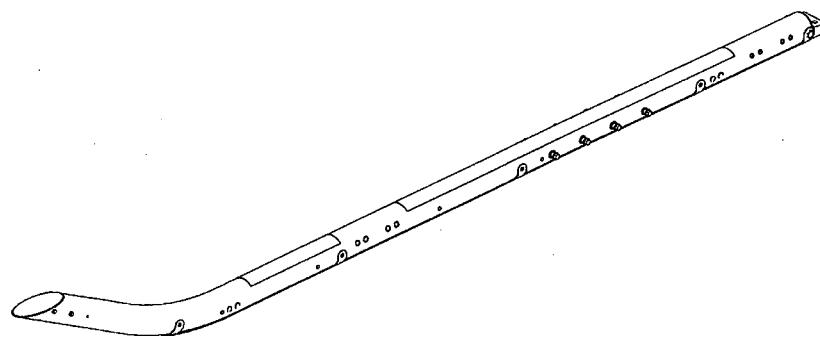
C

B

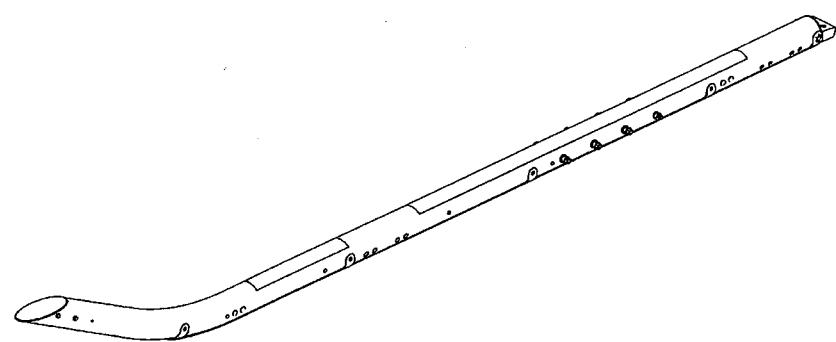
B

A

A



D4168-043 350 SKIDTUBE ASSEMBLY, LH



D4168-044 350 SKIDTUBE ASSEMBLY, RH

**RELEASED**  
2010-09-15  
JW

DESIGN	SC	DART AEROSPACE USA, INC.	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D4168	SHEET 3 OF 11
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
DATE	10.08.09	COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL. IT IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

8

7

6

5

4

3

2

1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



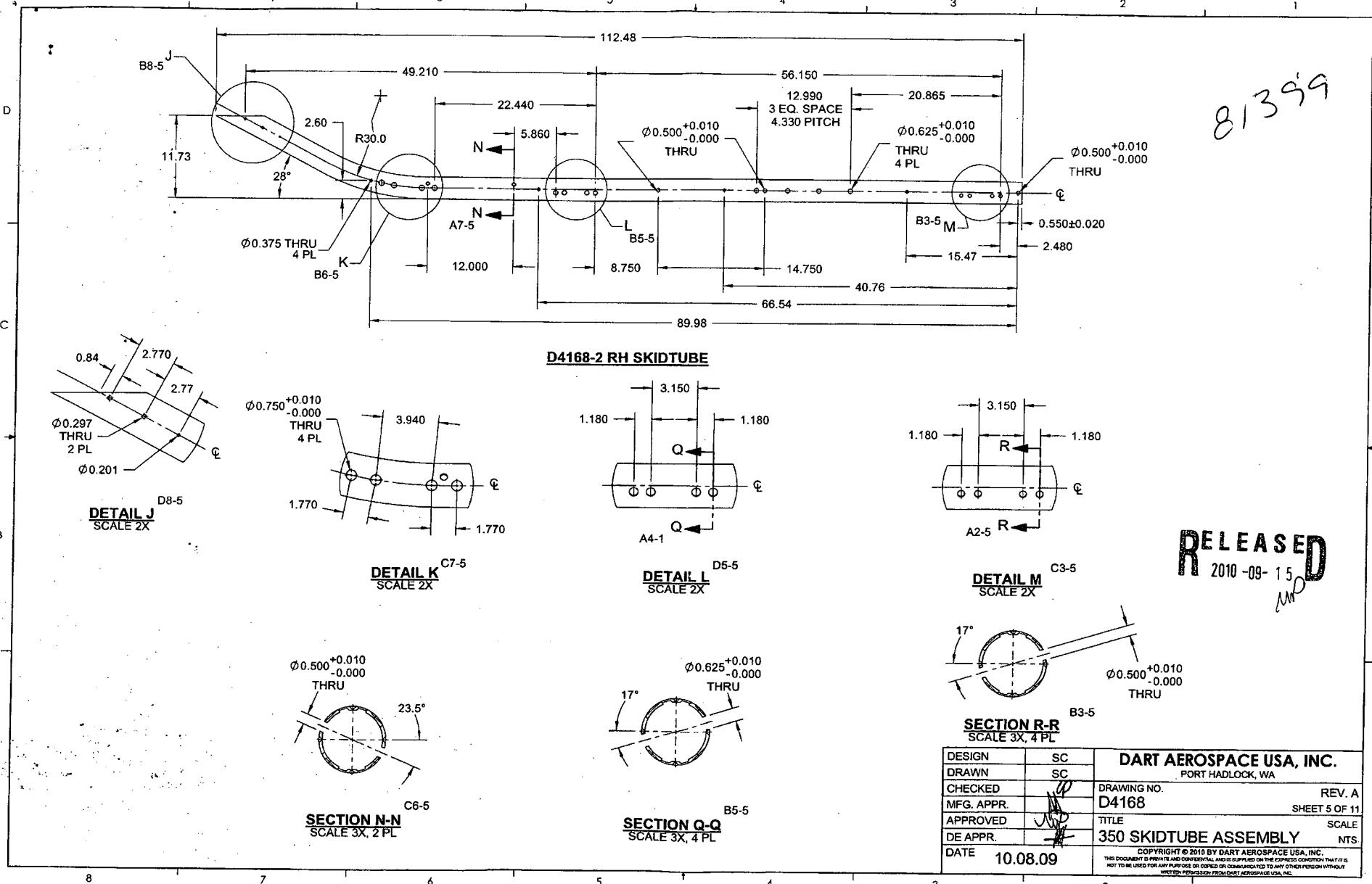
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN	SC	DART AEROSPACE USA, INC.
DRAWN	SC	PORT HADLOCK, WA
CHECKED	10/08/09	DRAWING NO.
MFG. APPR.	10/08/09	REV. A
APPROVED	10/08/09	D4168
DE APPR.	10/08/09	SHEET 5 OF 11
DATE	10.08.09	TITLE
		350 SKIDTUBE ASSEMBLY
		NTS

COPYRIGHT © 2010 BY DART AEROSPACE USA, INC.  
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS  
NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT  
WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

81399

RELEASED  
2010-09-15  
MM

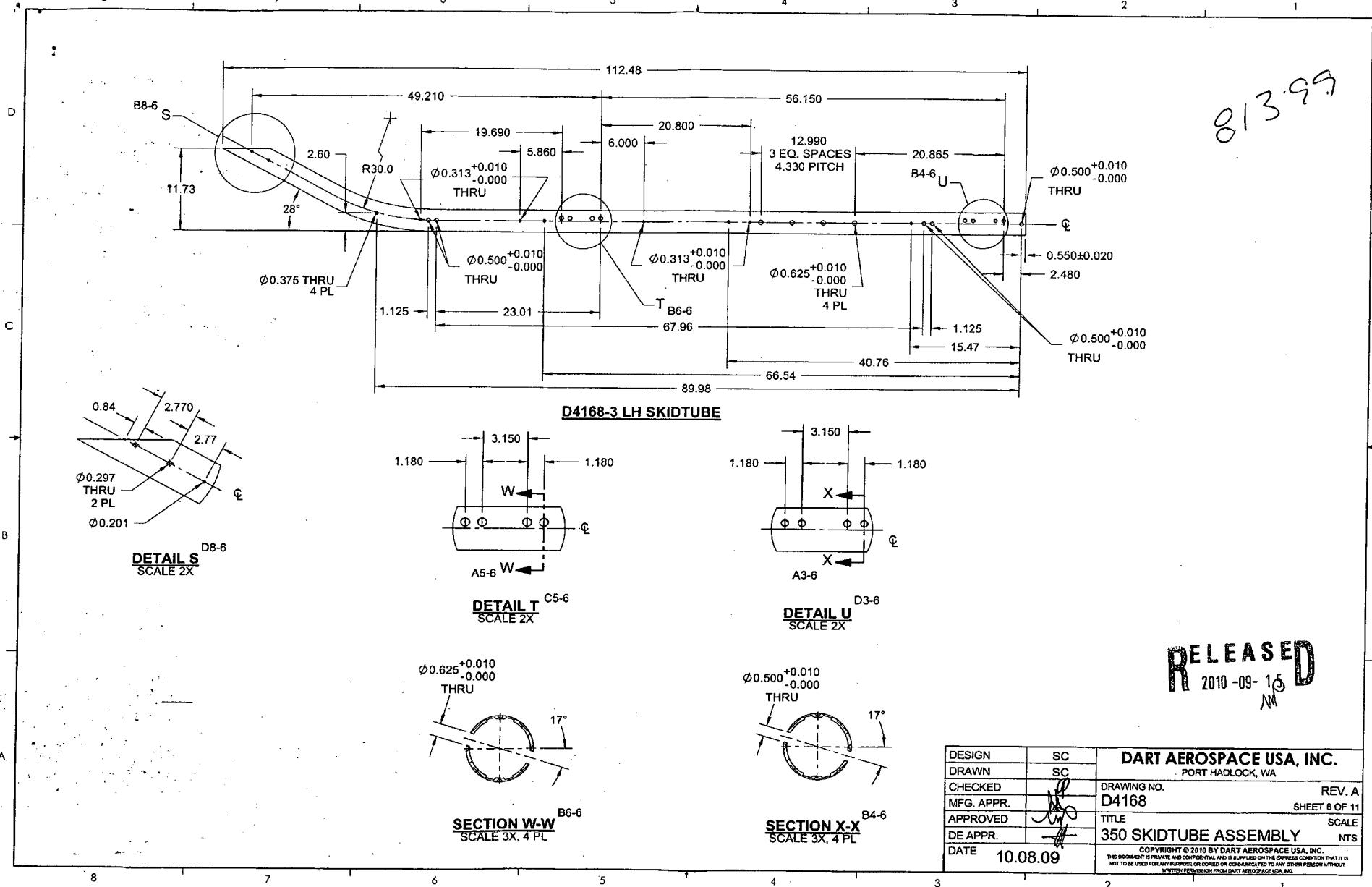
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



8/13.99

RELEASED 2010-09-15 AM

DESIGN	SC	<b>DART AEROSPACE USA, INC.</b> PORT HADLOCK, WA		
DRAWN	SC			
CHECKED	<i>JP</i>	DRAWING NO.	REV. A	
MFG. APPR.	<i>JP</i>	D4168	SHEET 6 OF 11	
APPROVED	<i>JM</i>	TITLE	SCALE	
DE APPR.	<i>JP</i>	350 SKIDTUBE ASSEMBLY	INTS	
DATE	10.08.09	COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PROPRIETARY AND CONFIDENTIAL AND IS PROVIDED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE COPIED OR DISCLOSED TO UNAUTHORIZED PERSONS.		

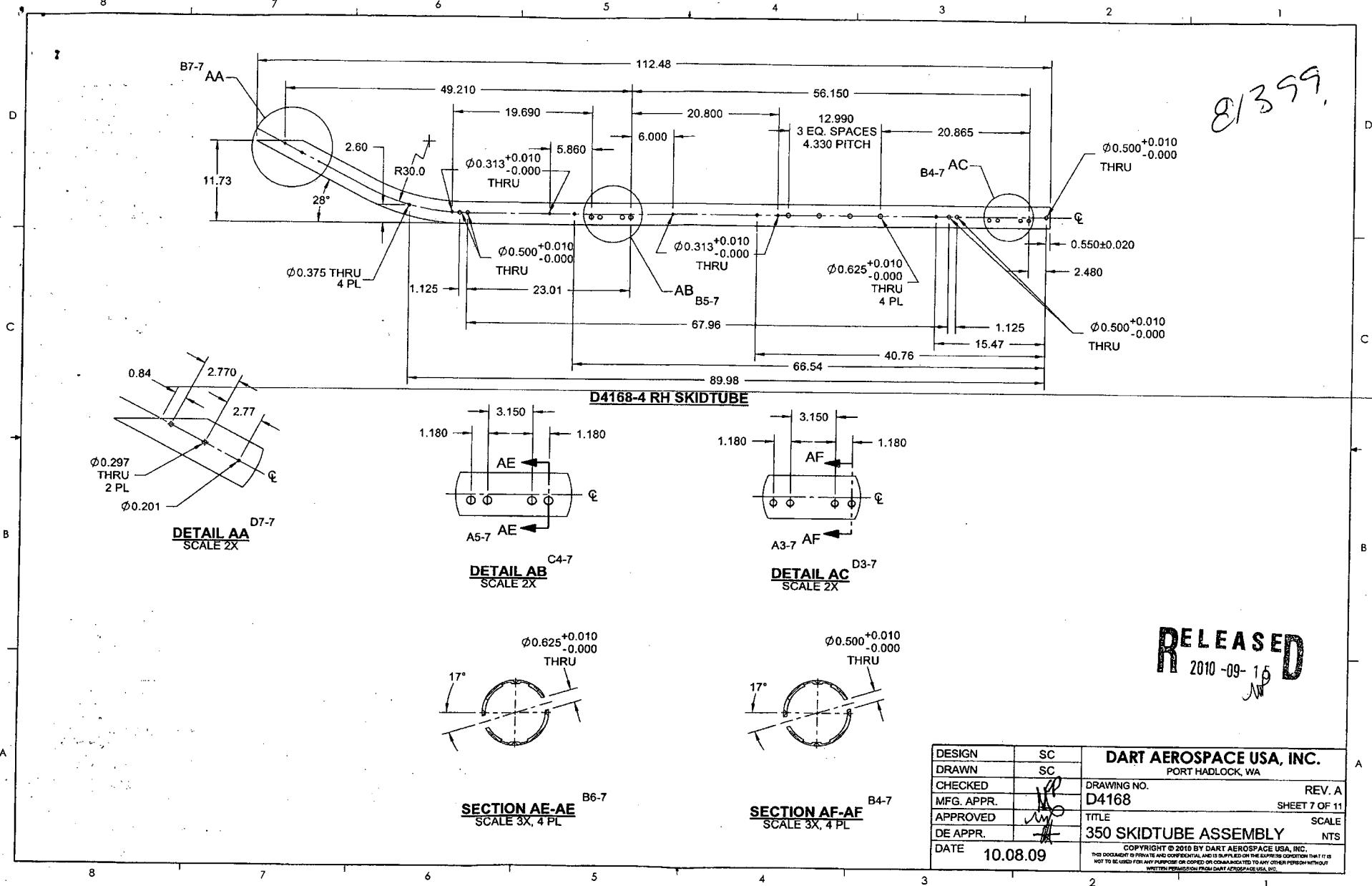
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

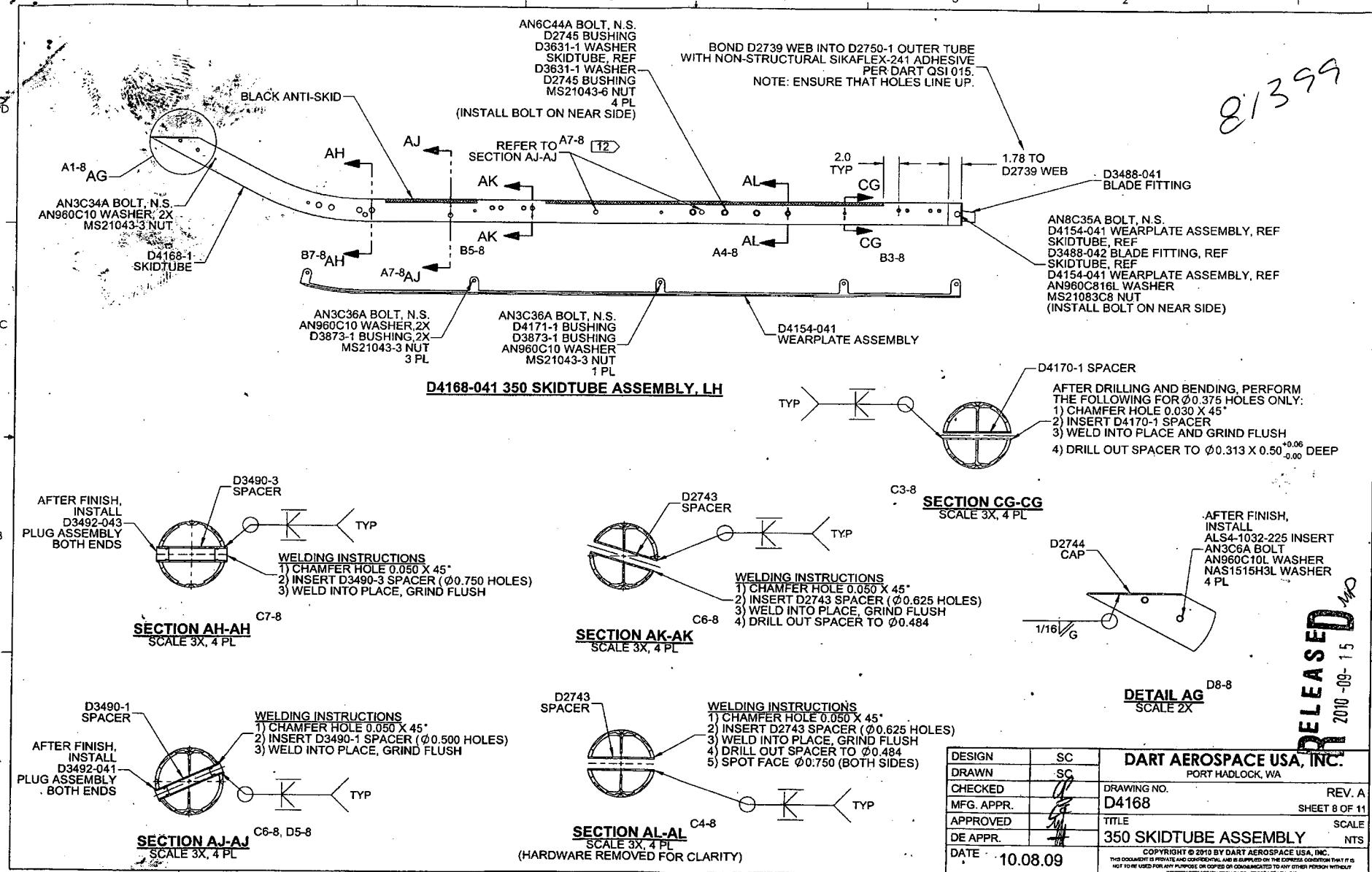


W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



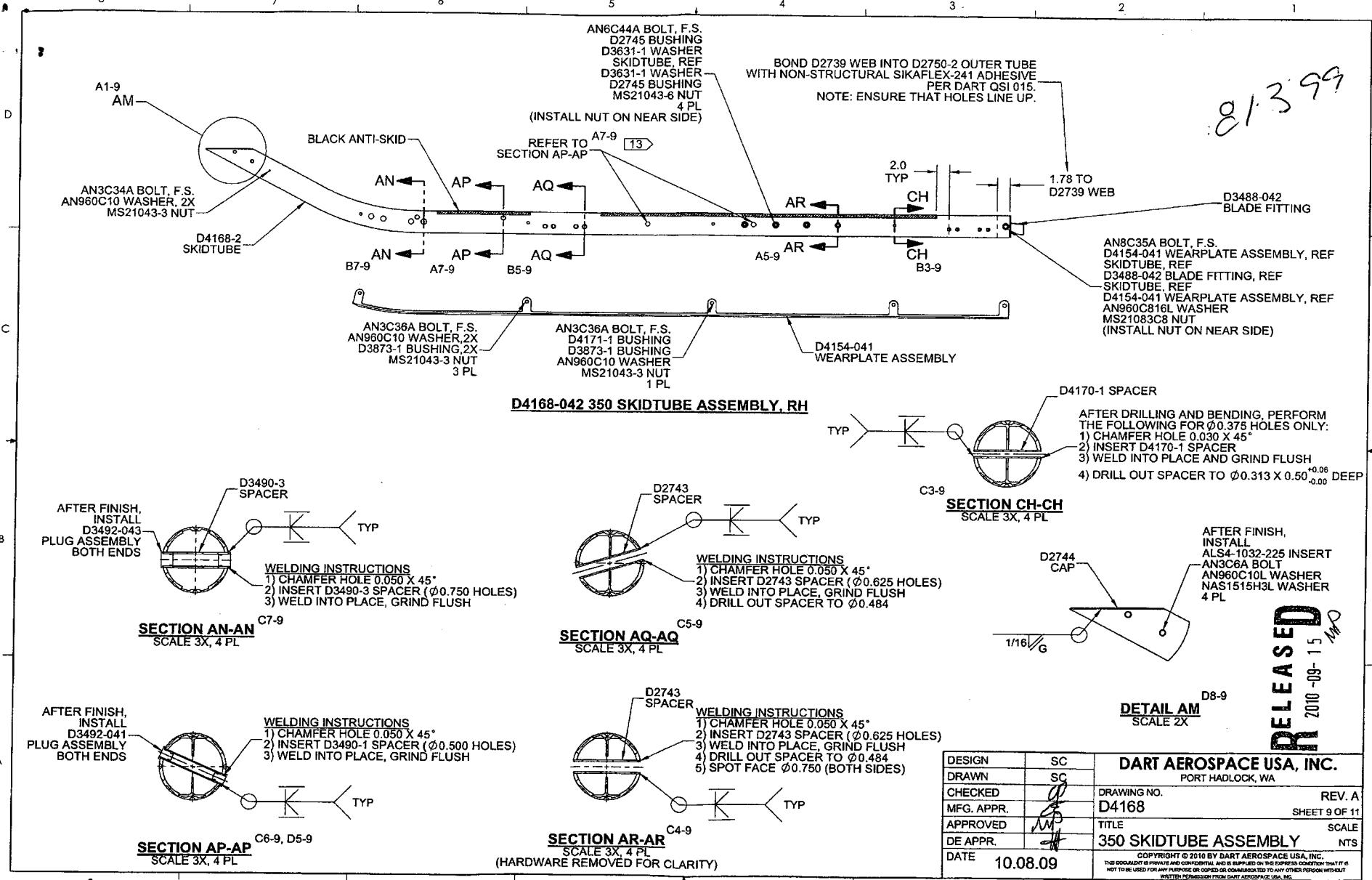
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



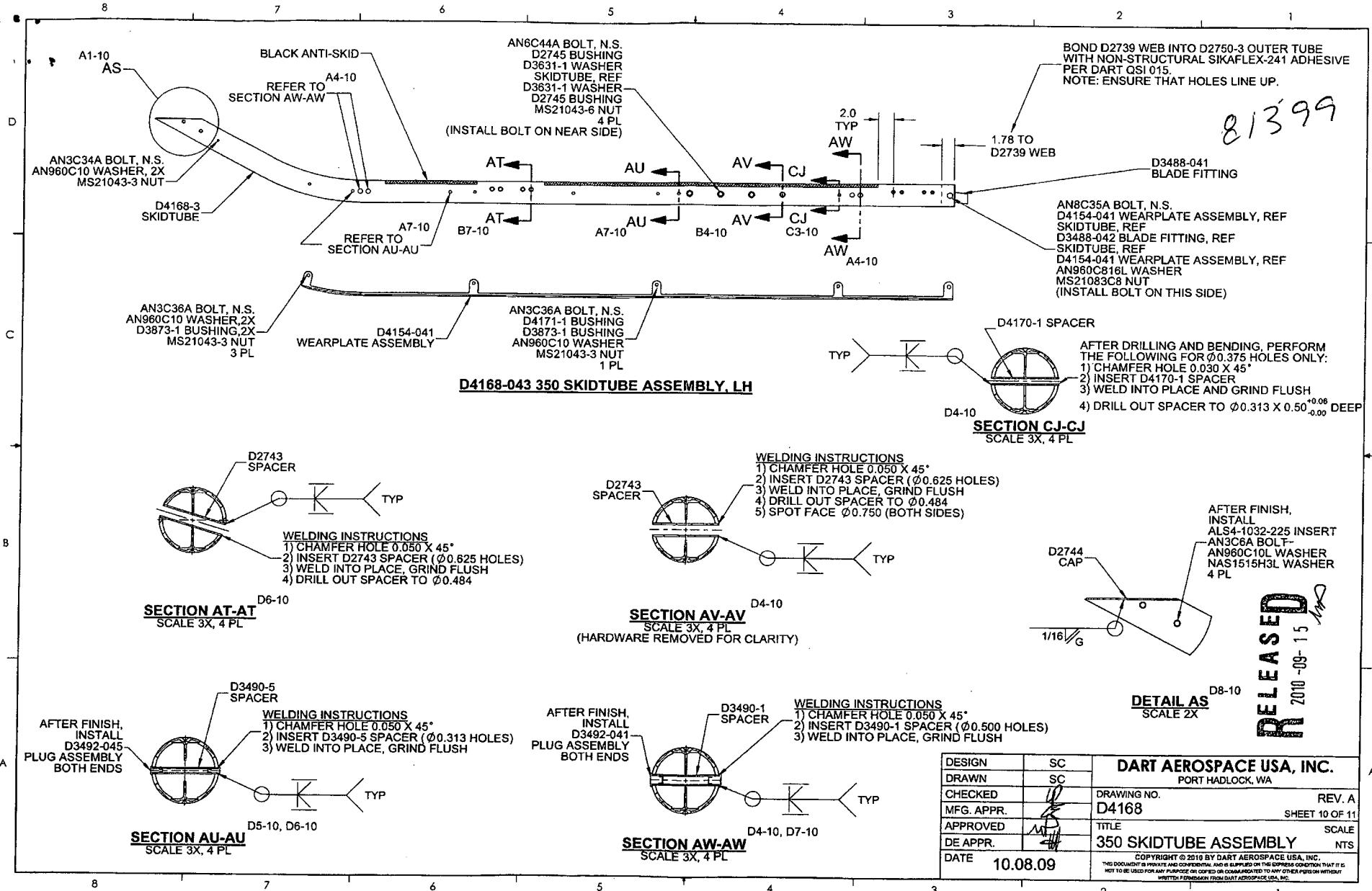
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



1399

RELEASED 2010-09-15 *ms*

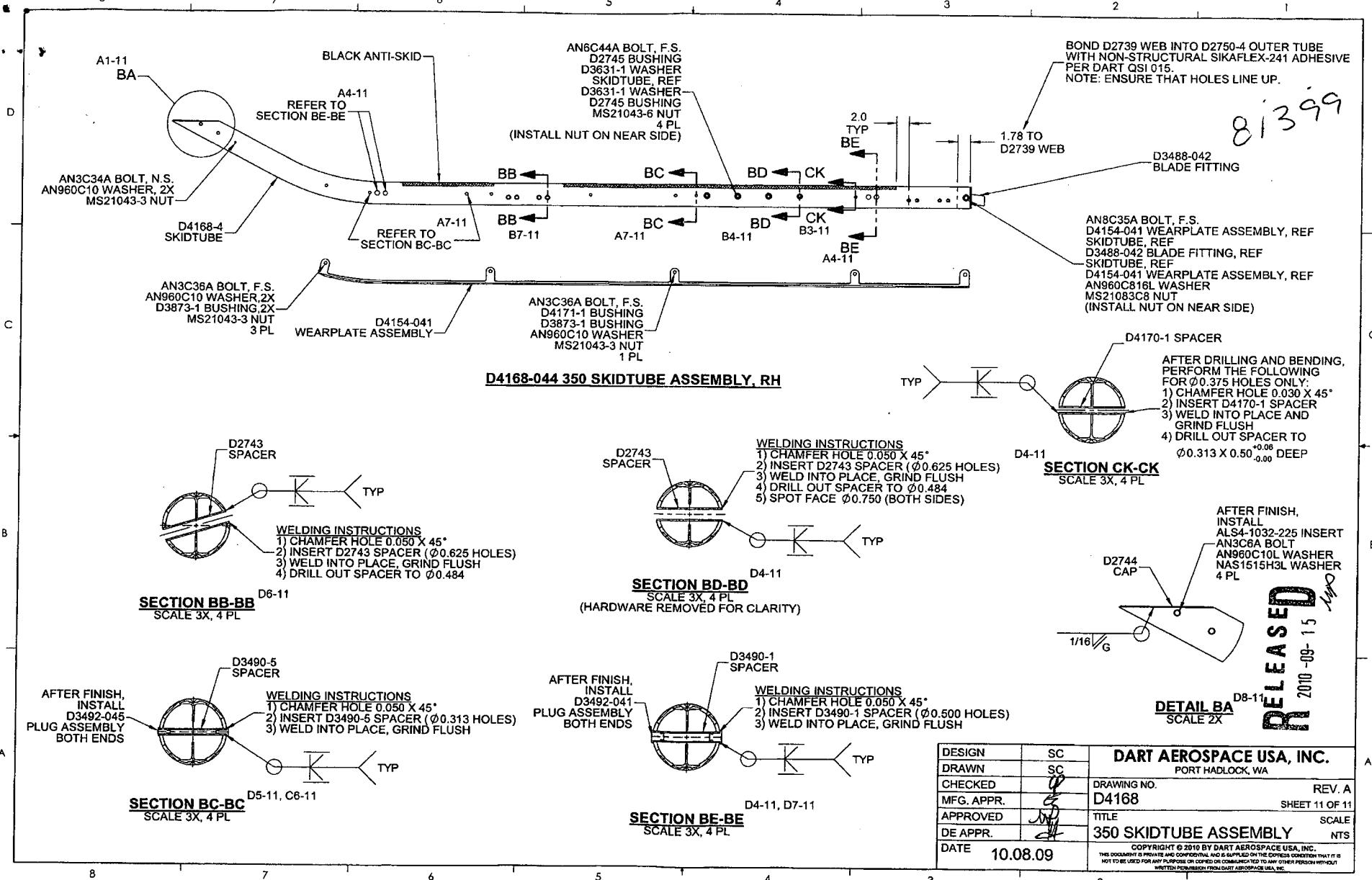
DESIGN	SC	DART AEROSPACE USA, INC.		
DRAWN	SC	PORT HADLOCK, WA		
CHECKED	<u>W</u>	DRAWING NO.	REV. A	
MFG. APPR.	<u>W</u>	D4168	SHEET 10 OF 11	
APPROVED	<u>M</u>	TITLE	SCALE	
DE APPR.	<u>W</u>	350 SKIDTUBE ASSEMBLY	NTS	
DATE	10.08.09	COPYRIGHT © 2010 BY DART AEROSPACE USA, INC.		
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE COPIED, REPRODUCED, OR DISCLOSED TO ANYONE EXCEPT THOSE EMPLOYEES OF DART AEROSPACE USA, INC. WHO ARE DULY AUTHORIZED TO RECEIVE IT.				

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN	SC	<b>DART AEROSPACE USA, INC.</b> PORT HADLOCK, WA		
DRAWN	SC			
CHECKED	DP	DRAWING NO.	REV. A	
MFG. APPR.	CS	D4168	SHEET 11 OF 11	
APPROVED	MD	TITLE	SCALE	
DE APPR.	CH	350 SKIDTUBE ASSEMBLY	NTS	
DATE	10.08.09	COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

NO. 286

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name: Barclay Elliott  
Job number: 82189  
Part number: A350 - 636 - 012  
Description: Skid tube  
Welding Process: Tig[] Mig[]  
Base material: Alum  
Current: AC[] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[] fail[]  
Penetration: pass[] fail[]

UNACCEPTABLE

Cracks: pass[] fail[]  
Undercut: pass[] fail[]  
Pin holes: pass[] fail[]  
Overlap (cold lap): pass[] fail[]  
Porosity (surface): pass[] fail[]  
Coloration: pass[] fail[]

Qualifier David David Date of Test Coupon 12-04-03

Welder Barclay Elliott Date of Test Coupon 12-04-03

The above named individual is qualified in accordance with AWS D17.1.2001 to weld